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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,862	08/09/2001	A. C. McQuaide JR.	00984	3811

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EXAMINER	
BARNIE, REXFORD N	
ART UNIT	**PAPER NUMBER**
2643	

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/925,862	MCQUAIDE ET AL.	
	Examiner	Art Unit	
	REXFORD N. BARNIE	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *26 November 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Rexford Barnie

REXFORD BARNIE
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Laybourn et al. (US Pat# 6,480,710) in view of Raith (US Pat# 6,493,547) or Nguyen et al. (US Pat# 6,070,067) or Nguyen et al. (US Pat# 6,070,067).

Regarding claim 1, Laybourn teaches a system and method for managing prepaid wireless service in (see fig. 1) comprising:

a wireless network in (see HLR, HLR database, SMSC, NBAS of fig. 1);

a wireless area network including:

a prepaid account database for storing subscriber account information (see fig 1 @ 230 or see fig. 1 @246 and col. 1)

a prepaid application module (IVR + SMS means, col. 1 lines 57-67 or CSS) for updating and initializing the prepaid account;

a credit transaction card transaction server coupled to a credit card database for checking available credit (PCS "payment clearing service element and col. 7),

a prepaid server (CSS or IVR) coupled to the prepaid account database and application module (see fig. 1)

a gateway (see ABS gateway, CP/IP, Ethernet TCP/IP and col. 2 lines 35-51).

Laybourn teaches being able to update a user's account and transmitting data to a user's terminal via SMS.

Laybourn teaches updating a user's account after a call but fails to teach relaying account balance to a user after a call.

Raith teaches an apparatus and methods for providing usage information in wireless communication system wherein a prepaid means in conjunction with a network can be used in updating a user's balance and relaying account information after a call in (see col. 4, col. 6 lines 13-19, col. 6 lines 63-67, col. 8 lines 61-67).

Nguyen teaches a prepayment system in (see fig. 2) wherein after a call, a mobile terminal can be updated with information from a prepayment means to a user after a call.

Adams et al. teaches a method and apparatus for communication in a communication system for providing post call charges in (see fig. 4) after a call automatically to a user by a communication processor.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of either Adams or Raith into that of Laybourn thus making a user aware of communication charges immediately for discrepancy purposes by storing this information and to aid in budgeting for future calls, see for instance (col. 1 of Adams or col. 1 lines 30-35).

Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laybourn et al. (US Pat# 6,480,710) in view of Raith (US Pat# 6,493,547) or Adams et

al. (US Pat# 6,181,785) and further in view of Suryanarayana et al. (US Pat# 6,487,401).

Regarding claims 2-5, Being able to access the internet using one's phone is notoriously well known and would have been obvious in light of Laybourn to provide services including prepaid recharging.

The combination implicitly fails to teach the claimed subject matter but Suryanarayana et al. teaches prepaid wireless telephone account regeneration in a wireless access protocol system wherein a prepaid account can be recharged in (see figs. 5-8, col. 4, col. 7 lines 20-30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Suryanarayana et al. into that of the combination thus giving mobile telephone users access to the internet in (see col. 1 of Suryanarayana) and being able to update one's balance regardless of geographical location, an advantage in areas where it would have been a toll call to call a number to update one's account.

Claims 6-14 and 21-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laybourn et al. (US Pat# 6,480,710) in view of Suryanarayana et al. (US Pat# 6,487,401).

Regarding claim 6, Laybourn teaches a prepaid communication system in (see fig. 1) for providing wireless access to anetwork for a prepaid account; coupling a wireless device to the network;

collecting a credit card account information from the prepaid subscriber through the network by the subscriber entering the credit card number into the wireless device in (see col. In (see col. 6 lines 9-28 and col. 7 lines 17-59);

establishing the prepaid account on a subscriber data and receiving a prepaid amount and checking the credit card account for the available credit in (see col. 7 lines 17-59-- line 21, lines 47-50).

Laybourn teaches a TCP/IP network through which a subscriber can connect to recharge or update one's account but fails to teach being implicitly being able to recharge an account using a WAP.

Suryanarayana et al. teaches a prepaid wireless telephone account regeneration in a wireless protocol system in (see col. 4 lines 47-57 and col. 7) that a user can enter an amount he wants, an account recharged by, which can be pre-stored or be done in time to a credit card account or any account.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Suryanarayana et al. into that of the combination thus giving mobile telephone users access to the internet in (see col. 1 of Suryanarayana) and being able to update one's balance regardless of geographical location, an advantage in areas where it would have been a toll call to call a number to update one's account.

Regarding claims 7-8, see the combination as set forth above.

Regarding claim 9, Laybourn teaches a prepaid communication system in (see fig. 1) for providing wireless access to anetwork for a prepaid account; coupling a wireless device to the network;

collecting a credit card account information from the prepaid subscriber through the network by the subscriber entering the credit card number into the wireless device in (see col. In (see col. 6 lines 9-28 and col. 7 lines 17-59);

establishing the prepaid account on a subscriber data and receiving a prepaid amount and checking the credit card account for available credit in (see col. 7 lines 17-59-- line 21, lines 47-50).

Laybourn teaches an TCP/IP network through which a subscriber can connect to recharge or update one's account but fails to teach being implicitly being able to recharge an account using a WAP and automatic recharge.

Suryanarayana et al. teaches a prepaid wireless telephone account regeneration in a wireless protocol system in (see col. 4 lines 47-57 and col. 7) that a user can enter an amount he wants, an account recharged by, *which can be pre-stored or be done in time to a credit card account or any accounts authorized by the subscriber.*

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Suryanarayana et al. into that of the combination thus giving mobile telephone users access to the internet in (see col. 1 of Suryanarayana) and being able to update one's balance regardless of geographical location, an advantage in areas where it would have been a toll call to call a number to update one's account, to be able to recharge an account automatically

without having to repeat the process over and over which saves user's time or in case where a user might not have enough money, control a recharge based on current available funds.

Regarding claims 10-12 and 14, the combination teaches the claimed subject matter in (see figs., col. 4 lines 4-12 of Suryanarayana et al.).

Regarding claims 13-14 and 28, It's known to send a low frequency tone to inform a user of the fact that account balance is nearing a threshold or should be recharged during a call and the examiner takes official notice to this effect.

Regarding claims 21 and 24, see the explanation as set forth regarding claims 6 and 9 because the claimed method steps would be performed by the claimed means.

Regarding claims 22-23, The combination teaches the claimed subject matter.

Regarding claims 25-27, 29 and 30, The combination including Suryanarayana et al. teaches the claimed subject matter in (see col. 4 and figs.).

Claims 15 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raith et al. (US Pat# 6,493,547) in view of Adams et al. (US Pat# 6,181,785).

Regarding claim 15, Raith teaches a method an apparatus for providing usage information in wireless communication systems comprising:

providing wireless access to a network which manages a prepaid account based on usage and upon receiving an indication that a communication session with the wireless terminal has ended, sending cumulative message which could include current

usage and past usage information as stored to a prepaid subscriber in (see col. 4, col. 6 lines 5-20, col. 8 lines 61-67) but fails to teach the step of querying.

It's well known to query an account to determine how much balance is available for calls and so forth.

Adams et al. teaches a communication system wherein charge data can be sent to a user after a call by querying a network element for this information in (see fig. 4) after call termination.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Adams et al into that of Raith thus making it possible to query a database for charge data as stored after a call to get accurate information as stored in the database for billing purposes and discrepancy purposes and to budget and plan future calls in (see col. 1 lines 53-55 of Adams et al.).

Regarding claim 30, see the explanation regarding claim 15 because the claimed method steps would be performed by the claimed apparatus.

Claims 16-20 and 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raith et al. (US Pat# 6,493,547) in view of Adams et al. (US Pat# 6,181,785) and further in view of Suryanarayana et al. (US Pat# 6,487,401).

Regarding claims 16-20, The combinations fails to teach the claimed limitations implicitly as taught by Suryanarayana et al.

Suryanarayana et al. teaches a prepaid wireless telephone account regeneration in a wireless protocol system in (see col. 4 lines 47-57 and col. 7) that a user can enter an amount he wants, an account recharged by, which can be pre-stored or be done in time to a credit card account or any account. Suryanarayana et al. teaches being able to notify a user of a need for a recharge in (see col. 4 lines 4-17) *can be done at any time* during a call, a possibility.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Suryanarayana et al. into that of the combination thus giving mobile telephone users access to the internet in (see col. 1 of Suryanarayana) and being able to update one's balance regardless of geographical location, an advantage in areas where it would have been a toll call to call a number to update one's account and to be able to receive prepaid services for thus who might not have easy access to telephones in remote areas.

Regarding claims 31-35, see the explanation above.

Claims 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laybourn et al. (US Pat# 6,480,710) in view of Raith (US Pat# 6,493,547) or Adams et al. (US Pat# 6,181,785) or Nguyen and further in view of Suryanarayana et al. (US Pat# 6,487,401).

Regarding claim 36, Laybourn teaches a prepaid communication system in (see fig. 1) for providing wireless access to a network for a prepaid account; coupling a wireless device to the network;

collecting a credit card account information from the prepaid subscriber through the network by the subscriber entering the credit card number into the wireless device in (see col. In (see col. 6 lines 9-28 and col. 7 lines 17-59);

establishing the prepaid account on a subscriber data and receiving a prepaid amount and checking the credit card account for available credit in (see col. 7 lines 17-59-- line 21, lines 47-50).

Laybourn fails to teach pushing an account balance to a terminal after or upon completion of each call.

Raith teaches an apparatus and methods for providing usage information in wireless communication system wherein a prepaid means in conjunction with a network can be used in updating a user's balance and relaying account information after a call in (see col. 4, col. 6 lines 13-19, col. 6 lines 63-67, col. 8 lines 61-67).

Adams et al. teaches a method and apparatus for communication in a communicate system for providing automated post call charges in (see fig. 4) after a call automatically to a user by a communication processor.

Nguyen teaches automatic updates to a user's terminal from a prepayment element (PPN).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of either Adams or Raith or Nguyen into that of Laybourn thus making a user aware of communication charges immediately for discrepancy purposes by storing this information and to aid in budgeting for future calls, see for instance (col. 1 of Adams).

The combination fails to teach alerting a user of need to recharge an account when an account falls below a threshold or start running low to continue a call or generally to inform users of an account status.

It's well known to send account status information to callers during a call or the need to recharge.

Suryanarayana et al. teaches a prepaid wireless telephone account regeneration in a wireless protocol system in (see col. 4 lines 47-57 and col. 7) that a user can enter an amount he wants, an account recharged by, which can be pre-stored or be done in time to a credit card account or any account. Suryanarayana et al. teaches being able to notify a user of a need for a recharge in (see col. 4 lines 4-17) *can be done at any time* during a call, a possibility.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to inform users or subscribers of an account status without cutting them off calls all of sudden, to inform them of a need to recharge which from the perspective of a service providers maximize if there is a recharge without having to re-create PIN numbers and also, to still be able to receive prepaid services in areas where one might not have access to phones readily.

Regarding claims 37-38, the combination teaches the claimed subject matter in light of Suryanarayana et al.

Response to Arguments

Applicant's arguments with respect to claims 1-38 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **REXFORD N BARNIE** whose telephone number is 571-272-7492. The examiner can normally be reached on M-F 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CURTIS KUNTZ can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRIMARY EXAMINER
REXFORD BARNIE
05/24/05

REXFORD BARNIE
PRIMARY EXAMINER